AMENDMENT TO THE CLAIMS

1. Cancelled

2. (Currently Amended) The mobile communications device of ~~claim 1~~ claim 3, further comprising:

a communication subsystem coupled to the processing device and configured to communicate with a wireless communication system, wherein the rechargeable battery also supplies power to the communication subsystem.

3. (Currently Amended) ~~The mobile communications device of claim 1, further comprising:~~ A mobile communication device, comprising:

a processing device;

a rechargeable battery that is configured to supply power to the processing device;

a Universal Serial Bus (USB) interface that is configured to connect to a USB port via a USB cable;

a charging subsystem coupled to the USB interface that receives power from the USB interface, and that is configured to charge the rechargeable battery with the power received from the USB interface; and

a soft-disconnect switch coupled between the USB interface and the processing device, wherein the soft-disconnect switch is opened and closed by the processing device in order to establish a USB charge configuration for the charging subsystem.

4. (Original) The mobile communication device of claim 3, wherein the USB interface comprises a data line and a power line, wherein the power line is coupled to the charging subsystem and the soft-disconnect switch couples the data line to the processing device.

5. (Original) The mobile communication device of claim 4, further comprising:

a USB controller coupled between the soft-disconnect switch and the processing device that monitors the data line and controls data communications over the data line between the processing device and a USB host or hub.

6. (Currently Amended) The mobile communication device of ~~claim 1~~ claim 3, wherein power to the mobile communication device is supplied through a power terminal, and wherein the charging subsystem comprises:

a power supplies switch having input terminals coupled to a power line on the USB interface and to the rechargeable battery and having an output terminal coupled to the power terminal, wherein the power supplies switch couples the power terminal to the rechargeable battery when the voltage level of the rechargeable battery is at or above a minimum threshold voltage and couples the power terminal to the power line when the rechargeable battery is below the minimum threshold voltage.

7. (Original) The mobile communication device of claim 6, wherein the charging subsystem further comprises:

a voltage regulator coupled between the power line and the power supplies switch, the voltage regulator configured to regulate the voltage on the power line and supply a substantially constant voltage to one of the input terminals of the power supplies switch.

8. (Original) The mobile communication device of claim 6, wherein the charging subsystem further comprises:

a charge controller coupled to the power line and the rechargeable battery, the charge controller configured to supply power to the rechargeable battery from the power line when the voltage level of the rechargeable battery.

9. (Original) The mobile communication device of claim 8, wherein the charging subsystem further comprises:

a transistor having a first current-carrying terminal coupled to the power line, a second current-carrying terminal coupled to the rechargeable battery, and a control terminal coupled to the charge controller, wherein the charge controller controls the current flow through the current-carrying terminals of the transistor in order to control the amount of current supplied to the rechargeable battery from the power line.

10. (Original) The mobile communication device of claim 9, wherein the first current-carrying terminal is coupled to the power line through a series resistor.

11. (Original) The mobile communication device of claim 9, wherein the processing device is coupled to the charge controller to provide a charge configuration.

12. (Original) The mobile communication device of claim 9, wherein the charging subsystem further comprises:

a charge current monitor coupled between the second current-carrying terminal of the transistor and the rechargeable battery, the charge current monitor configured to monitor the current supplied to the rechargeable battery from the power line and generate a charge current signal.

13. (Original) The mobile communication device of claim 12, wherein the charging subsystem further comprises:

a charge current controller coupled to the charge current monitor that generates a control signal as a function of the charge current signal, wherein the control signal is coupled to the charge controller and is used by the charge controller to control the amount of current flow through the current-carrying terminals of the transistor.

14. (Original) The mobile communication device of claim 8, wherein the charge controller supplies power to the rechargeable battery in a multiple mode charging operation, the multiple mode charging operation including at least one operation selected from the group consisting of: constant current, constant voltage, constant power, programmable constant current, and pulse current.

15. Cancelled

16. ~~The method of claim 15 wherein the device further comprises~~ A method of charging a rechargeable battery in a device having a charging subsystem, a USB interface and a processing device, the USB interface having Vbus and GND lines connected to the charging subsystem and ~~and wherein the USB~~

~~interface further comprises~~ D+ and D- lines electrically connected to the processing device, the charging subsystem connected to the rechargeable battery, the method ~~further~~ comprising the steps of:

receiving a charge configuration from the USB interface; ~~and~~

signaling the charge configuration to the charging subsystem;

deriving power from the Vbus and GND lines at the charging subsystem; and

charging the rechargeable battery using the derived power using the charging subsystem.

17. (Original) The method of claim 16 wherein the device further comprises a soft-disconnect switch coupling the D+ and D- lines to the processing device, the method further comprising the steps of:

soft-disconnecting from the USB interface; and

soft-connecting to the USB interface.

18. (Original) The method of claim 17 further comprising the steps of:

computing a maximum value for a power allotment request for the purpose of charging;

soft-connecting to send the power allotment request via the USB interface; and

if the power allotment request is not granted, soft-disconnecting, decreasing the power allotment request and repeating the previous step until the request is granted.

19. (Currently Amended) The method of ~~claim 15~~ claim 16 further comprising the steps of:

detecting the presence of a host or hub via the USB interface;

receiving a charge configuration from the host or hub; and

signaling the charge configuration to the charging subsystem.

20. (Original) The method of claim 19 further comprising the step of signaling a charge status to the host or hub via the USB interface.

21. (Original) A method of charging a mobile communication device having a rechargeable battery and a charging subsystem, the mobile communication device connected via a unified data and power bus to a host system, the method comprising the steps of:

obtaining a charge configuration from the unified bus;

applying the charge configuration to the charging subsystem; and

charging the rechargeable battery using power derived from the unified bus.

22. (Original) The method of claim 21, wherein the unified bus is a Universal Serial Bus (USB), the method further comprising before obtaining a charge configuration, the steps of:

entering the USB attached state;

entering the USB powered state;

entering the USB default state;

entering the USB addressed state; and

entering the USB configured state.

23. (Original) The method of claim 22 further comprising the step of providing a USB charging function at the host which operates over the USB.

24. (Original) The method of claim 23 further comprising the step of providing a USB Personal Information Management (PIM) synchronization function at the host which operates over the USB.

25. (Original) The method of claim 21 further comprising the steps of:

receiving a battery capacity request from the host via the unified bus; and

reporting the capacity to the host via the unified bus.

26. (New) A mobile communication device, comprising:

a rechargeable battery for powering the mobile communication device;

a Universal Serial Bus (USB) interface for connecting the mobile communication device to a USB host device;

a charging subsystem coupled to the rechargeable battery and the USB interface, the charging subsystem being operable to charge the rechargeable battery with power received by the USB interface from the USB host device;

means for requesting a power allotment from the USB host device, the power allotment controlling a maximum amount of power that the charging subsystem can draw from the USB host device; and

means for determining if the power allotment received from the USB host device is less than a requested value, and if the power allotment is less than the requested value then resetting a USB connection between the mobile communication device and the USB host device in order to receive a new power allotment from the USB host device.

27. (New) The mobile communication device of claim 26, wherein the USB interface includes USB data lines and USB power lines, and wherein the rechargeable battery is charged with power received from the USB host device via the USB power lines.

28. (New) The mobile communication device of claim 27, wherein a connection between the USB host device and the mobile communication device via the USB data lines is interrupted in order to reset the USB connection between the mobile communication device and the USB host device.

29. (New) The mobile communication device of claim 26, wherein the mobile communication device is operable to request a lesser power allotment from the USB host device if the received power allotment is less than the requested value.